WHAT IS CLAIMED IS:

1. A developing device for developing electrostatic image formed on an image carrying member, said developing device comprising:

a developing container for containing a developer including toner and carrier;

a first developer carrying member for carrying the developer within said developing container and supplying the developer to the electrostatic image formed on said image carrying member;

a restricting member for restricting thickness of the developer carried on said first developer carrying member; and

a second developer carrying member for carrying the developer received from said first developer carrying member and supplying the developer to the electrostatic image formed on said image carrying member;

wherein an average inter-peak distance on the surface of said first developer carrying member is greater than an average inter-peak distance on the surface of said second developer carrying member.

2. A developing device according to Claim 1, satisfying the expression

$Sm2 < D \leq Sm1$

wherein Sm1 represents the average inter-peak distance on the surface of said first developer carrying member, Sm2 represents the average inter-peak distance on the surface of said second developer carrying member, and D represents an average grain diameter by weight of the carrier.

3. A developing device according to Claim 1, satisfying the expression

$(Rz1/Sm1) < (Rz2/Sm2)$

wherein Sm1 represents the average inter-peak distance on the surface of said first developer carrying member, Sm2 represents the average inter-peak distance on the surface of said second developer carrying member, Rz1 represents a ten-point average roughness of said first developer carrying member, and Rz2 represents a ten-point average roughness of said second developer carrying member.

4. A developing device according to Claim 3, satisfying the expressions

$(D/3) \leq Sm1 \leq 3 \times D$

and

$(D/3) \leq Sm2 \leq 3 \times D$

wherein D represents an average grain diameter by weight of the carrier.

5. A developing device according to Claim 4, satisfying the expressions

$(D/2) \leq Sm1 \leq 2 \times D$

and

$(D/2) \leq Sm2 \leq 2 \times D$.

6. A developing device according to Claim 1, wherein the surface of said first developer carrying member is subjected to roughening processing using essentially-spherical polishing particles, and the surface of said second developer carrying member is subjected to roughening processing using non-spherical polishing particles.

7. A developing device according to Claim 1, wherein the direction of rotation of said first developer carrying member and said second developer carrying member is the same.

8. A developing device according to Claim 1, further comprising first magnetic field generating means fixed within said first developer carrying member, for magnetically transporting developer, and second magnetic field generating means fixed within said second developer carrying member, for magnetically transporting developer, wherein said first magnetic field generating means and said

second magnetic field generating means have magnetic poles of the same magnetic polarity at a position where said first magnetic field generating means and said second magnetic field generating means face one another.

9. A developing device for developing electrostatic image formed on an image carrying member, said developing device comprising:

a developing container for containing a developer including toner and carrier;

a first developer carrying member for carrying the developer within said developing container and supplying said developer to the electrostatic image formed on said image carrying member;

a restricting member for restricting thickness of the developer carried on said first developer carrying member; and

a second developer carrying member for carrying developer received from said first developer carrying member and supplying the developer to the electrostatic image formed on said image carrying member;

wherein the expression

$(Rz1/Sm1) < (Rz2/Sm2)$

is satisfied;

wherein Sm1 represents an average inter-peak distance

on the surface of said first developer carrying member, Sm2 represents an average inter-peak distance on the surface of said second developer carrying member, Rz1 represents a ten-point average roughness of said first developer carrying member, and Rz2 represents a ten-point average roughness of said second developer carrying member.

10. A developing device according to Claim 9, satisfying the expressions

$$(D/3) \leq Sm1 \leq 3 \times D$$

and

$$(D/3) \leq Sm2 \leq 3 \times D$$

wherein D represents an average grain diameter by weight of the carrier.

11. A developing device according to Claim 10, satisfying the expressions

$$(D/2) \leq Sm1 \leq 2 \times D$$

and

$$(D/2) \leq Sm2 \leq 2 \times D.$$

12. A developing device according to Claim 9, wherein the direction of rotation of said first developer carrying member and said second developer carrying member is the same.

13. A developing device according to Claim 9, further comprising first magnetic field generating means fixed within said first developer carrying member, for magnetically transporting developer, and second magnetic field generating means fixed within said second developer carrying member, for magnetically transporting developer, wherein said first magnetic field generating means and said second magnetic field generating means have magnetic poles of the same magnetic polarity at a position where said first magnetic field generating means and said second magnetic field generating means face one another.